

September & October

TWIN CITIES ATARI INTEREST GROUP

Amodem 7.5 Review	Pg. 7	Benchmarks, How to Use Them	Pg. 3
Customizing AUTORUN.SYS	Pg. 13	Editor's Notes	Pg. 11
Goldrennuer (ST) Review	Pg. 12	Icontroller Review	Pg. 5
How to Kill an Organization	Pg. 13	No Free Lunch?	Pg. 6
President's Notes	Pg. 3	Random Number Generation	Pg. 4
SynFile DIF File Conversion	Pg. 8	XMM801 Utility Disk Review	Pg. 10



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A
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Street:_____

City:_____ State:_____ Zip Code:_____

What computer do you own?_____

What are your computer interests?_____

Membership dues are \$15 per family, per year. Please make checks payable to the Twin Cities Atari Interest Group. Please do not mail cash. Mail to: Taig

P.O. Box 26128
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President's Notes For August 1987

By Steven Ingalsbe

The top news item this month is the new benefit you get for being a TAIG member. Wizard's Work is offering TAIG members a sweet deal on hardware and software. You can get 22% off ST suggested retail prices, 30% off Atari software, and 30% off Epson printers suggest retail prices. Pretty good deal, right? There is a catch. First, you MUST be a TAIG member, and you must be able to prove it (you still have your membership card don't you?). Second, at these prices you don't get support, demo's, ect... You also have to pay CASH. There is a 5% surcharge for personal checks, or VISA or Master Card use. You also can't get the product demonstrated. It is strictly cash and carry, just like mail order, which it was designed to compete with. If something doesn't work, they will exchange it, but that is all of the support you will get. If you buy Atariwriter +, and then can't figure out how to use it, you can't call them for help (besides, that is why there are user groups, isn't it?). I feel that this is a nice deal for people who buy stuff and don't need technical support. They sit down and figure out how to use it without outside help. If you are the type of person who wants to have support, then they are still offering 10% off list price for TAIG members, and you can call them with your problems.

Along those same lines, please support the local ATARI dealers. It would be a real shame to lose them and have to count on mail order for everything. Most of the local dealers support TAIG, and we should try to support them. Thanks.

There has been some discussion on the BBS lately about the lack of ST support within the TAIG users group. TAIG does support ST, but we have very few members who chip in and help. We currently have approximately 10 members (including the officers) who chip in a help to keep this running. Of those 10, 3 have ST's. I do not own an ST, and I don't plan to buy one in the near future, so I don't go looking for ST news. I have asked for someone to volunteer as a ST chairman, but nobody has stepped forward. I have also asked that people give me ST news to read at the meetings, and so far I haven't received one article. So, who is not supporting the ST? From here it looks like the members are not supporting it. The old TAIG BBS had an entire message base for the ST only, and it averaged 1 message a week. There are a lot of things that you can blame on the officers, but I will not take the blame for this. I hope the membership can decide what they want, and get moving in that direction. I've said it before, and I'll say it again. This is your club, and YOU decide where it is going and how it will get there. If you chip in and help, it will be a better club. If you just take without giving back, then you have no right to complain.

Benchmarks

What They Are and How to Use Them

Carl Miller

Back in the "good old days" a craftsman would bend a horseshoe or cut a wagon tongue by comparing it to a small scratch mark he had made on his workbench. He could tell if his piece was too large or too small by making a quick check to a measurement that had no meaning or units of measure other than what he had assigned to it.

Benchmark programs were written decades ago for a similar reason. If you wanted to see if your computer was faster or more efficient than someone else's, you would simply run a "benchmark" program on each machine to see which computer could complete it first. The program had no particular purpose other than comparing execution times of hardware or (usually) software.

How Fast is Fast???

Does your computer have a real time clock? The Atari 8-bit machines all have three locations in memory that keep track of running time, in 60ths of seconds. Memory location 20 is incremented every 60th of a second. When it gets to 255 (the largest value it can hold), it rolls over to 0 and location 19 is incremented. The same happens for locations 19 and 18. Try this little program to see how the clock works:

```
10 PRINT PEEK(18), PEEK(19), PEEK(20)
20 GOTO 10
RUN
```

You can use this clock as a benchmark timer to see how fast different instructions execute in your machine. But most instructions take place very fast! So you'll have to magnify what happens with a FOR-NEXT loop. If you wrote:

```
NEW
10 POKE 19,0:POKE 20,0
20 A=5
30 PRINT PEEK(19), PEEK(20)
RUN
```

you'd see that the counter, zeroed in line 10, didn't count very high before the instructions in line 20 was complete. Let's instead make a loop around the operation in line 20, with:

```
15 FOR I=1 TO 1000
25 NEXT I
```

Now, you'll see that just assigning a value to a variable takes some amount of time. How much time does it take to execute a REMark statement? The computer will not "execute" a REM, but it does take time to interpret what REM means. You can see that by adding to the above program:

21 REM
RUN

Everything between line 15 and line 25 will be preformed 1000 times. And the time that it takes to do all of that is displayed as two values, printed after it is all done. The first is how many times location 20 counted past 255 (256 times 1/60 seconds), and the second shows how many 60ths of a second the operation took if the first number is zero.

You can examine any instruction (or group of instructions) by placing them between lines 15 and 25 above, and seeing how long the computer takes to execute them (including FOR and NEXT instructions) 1000 times. You've just created a benchmark!

To see how slow some instructions are, replace 20 and 21 with:

```
21
20 A=COS(I)
RUN
```

We don't care what values are given to the variable A, but we want to see how long it takes to assign 1000 cosines of some number. All of a sudden, the computer begins to take a lot of time. Experiment with +, /, *, RND(0), INT(1), exponentiation, whole numbers, non-integer values, and trigonometric operations.

Some programs report real-time clock values as "jiffies", as follows:

```
30 JIFFIES=PEEK(20)+256*PEEK(19)
35 PRINT JIFFIES/60
```

which would actually result in the number of seconds being displayed. For very long times, you would also have to zero location 18 as well as 19 and 20, and then add that value once you're all done, like:

```
30 JIFFIES=PEEK(20)+256*PEEK(19)+256*PEEK(18)
```

Where's That Darned Random Number Generator?
by Carl Miller

BASIC has a function written as RND(0), which creates a random value between 0.0 and 0.999 (or thereabouts). But Atari BASIC is so slow, you might do well to find a faster way to get a random value in your BASIC program.

There is, within the Atari Operating System (OS) RAM, a location that is constantly being changed by the OS. When you PEEK at that location (from BASIC) the value is someplace between 0 and 255, and always different (because the OS changes it faster than BASIC can repetitively look at it with PEEK statements). I recently needed a fast random number generator, but I had forgotten where that special location was (up around 53700; but where, exactly?). PANIC! After a little reflection, I came up with the following program to find it.

```
10 FOR N=53700 TO 53800
20 GRAPHICS 7:COLOR 1
30 PRINT N
40 FOR A=1 TO 100
50 PLOT (159/255)*PEEK(N), (79/255)*PEEK(N)
60 NEXT A
70 NEXT N
```

To explain: In graphics mode 7, we can plot over an x-y space from 0,0 to 159,79. That's 160 pixels in the x-direction and 80 pixels in the y-direction. The inner FOR-NEXT loop plots 100 points over the entire x-y graphics screen for every memory location from 53700 to 53800 (taken care of by the outer loop). The (159/255) will normalize PEEK values, which can be up to 255, for x-direction values from 0 to 159; likewise for the y-dimension, from 0 to 79. Every time a PEEK looks at a memory location, if the value in that location has changed, the PLOT will move the cursor. If the value remains unchanged, only one dot will appear for all one hundred PLOTTed points. We plot in GR1 7 so that the memory address being examined can be printed at the bottom of the screen (in the text window). Run the program above, and find for yourself which location(s) can be used to PEEK at for random values. (Using the computer as a tool to examine itself can be a fascinating process.)

Once you've found the location (let's call it "loc"), run a speed comparison to BASIC. Which of these is faster to execute, and by how much?

```
a) A=PEEK(loc)
   or
b) A=RND(0)
```

(Hint: Use the four-line benchmark technique I described earlier in this newsletter.)

Remember, you're not getting something (speed) for free. The PEEK only gives 256 distinct levels. The RND, however, gives many times more levels (0, 0.000001, 0.000002, etc.). If the random value that your program actually needs is only 0-255, you can gain even more speed over the total normalizing operation, which is INT(256*RND(0)).

MEETING DATES 1987

OCTOBER 25

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IconTroller
by Jim Johnson

Most joysticks on the market advertise their ability to hold up under combat conditions inspired by arcade games. Their massive designs are intended for two hand use independent of the keyboard. They are inappropriate for simple pointing of the light deft movements of drawing. Mice are better suited for the latter, but require desk space dedicated to their use. Suncom manufactures a nice compromise device the call an IconTroller.

The IconTroller is a small joystick that permanently attaches itself to the righthand side of the keyboard with an adhesive pad. A short coiled cord leads to a joystick port. Small does not mean cheap. The joystick responds to light pressure, but the feel is closer to the tactile feedback of high quality micro switch game sticks rather than the ambiguous mush of inexpensive spring contact switches.

If you have other devices that you typically leave connected to the joystick port, the IconTroller won't change your practice. The 9-pin plug is a feed-through design that allows both the IconTroller and any other joystick port device to share the port. Naturally your results may be unpredictable if you attempt to use two devices simultaneously.

I have used the IconTroller with a variety of graphic, pointing, and game programs and like its performance. The

stick is always in the same position relative to the keys, and typically requires only one hand to operate. I have cleaned up some of my cord mess and reclaimed desk space previously used by other joystick devices. Suncom does not recommend this joystick for use with arcade games. I obtained a great score with Pac-Man (for me anyhow), but I agree with Suncom. This stick is not fragile, but it is not intended for emotional, heavy handed use.

For all the praise, I would be remiss if I did not mention the IconTroller's short comings. These can all be traced to a cause familiar to Atarians; this device was primarily designed for the Commodore 64/128. The small print on the box also lists the Atari 800XL and ST. My IconTroller is installed on a 130XE. First, the 9-pin plug is not firmly seated in the joystick port. Atari made access to the ports on the 130XE a little on the small side. The plug will not fall out on its own, but can be knocked out with little effort. Second, although the joystick is on the side of the keyboard, the adhesive pad attaches to the top of the keyboard via an extension wing. This wing is a bit wider than the area available on the 130XE and slightly overhangs the front of the keyboard. The last short coming will only offend the fashion conscious. the IconTroller is clothed in Commodore off-white.

List price on the IconTroller is \$19.95, but discounts are generally available on Suncom products. The IconTroller is not appropriate for everyone, but will work well for many of us.

NO FREE LUNCH?

Henry M. Connor

I am generally sympathetic with our friend Jim Johnson's admonition against expecting a lot from our Group when you can't contribute much. He is a very good writer and his article is well thought out.

As in any controversy, however, it is only fair that someone give a minority report. As a fairly new member, I feel that there is another side to the story. I know that the rules you have established for this BBS are considered fair by those who made them up. They are similar to rules used by other Groups which pre-date the advent of the widespread use of home based computers. In fact, the people who started the BBS idea were programmers and system analysts who were sharing their technology with others who had similar skills. That has to be the origin of the Download/Upload ratio as a measure for maintaining access level. What's wrong with that?

There are several things wrong with that if you give it some thought.

- 1.) A lot of us have computers now who make our livings in quite different fields.
- 2.) This BBS, like it or not, is in competition with others. Some of those others do not tie access to payment of a membership fee.
- 3.) If we are not programmers, what can we upload? Surely you don't want us to pirate downloads from another source just to maintain access level.
- 4.) If this BBS is only for skilled practitioners, why don't we say so? Is it possible that with a little patience the novice can later become a contributor?

Maybe before we give access to a new member we should examine his/her credentials. If not a skilled programmer, the new applicant might be given an associate membership. Above all, we have to tell the potential member what the rules are BEFORE they sign the check. When I called this BBS I Captured the rules and printed them out. What a surprise! They were out of date. I couldn't join on-line as the HELP file indicated I could. Everything I tried to do was denied because my access level was too low. I was assured that after my check cleared I would get normal access. So, I went to the next meeting and signed on. If you're not familiar with St. Louis Park, I invite you to try to find the Rec. Center.

n

When, after a month, nothing had changed, I complained. I knew that the problem involved a 'volunteer', so there was no bitterness in the complaint. It was my first experience with the process, and I was a little like the virgin cowboy meeting his mail-order bride for the first time. I knew what I wanted to do and I was not getting the cooperation I needed to get it done. Imagine my surprise when I called the next BBS and was given full access with no strings. See what I mean by competition? See what I mean about telling the new caller what he/she can expect?

VOLUNTEER?

I have nothing but respect for volunteers. I volunteered once myself in the L.P.W.* There is another connotation to Jim's definition of volunteer. The volunteer expects nothing in return for his efforts but gratitude from his beneficiaries. In other words, voluntarism like virtue is its own reward. Try to thank a volunteer for his efforts. He will say, "Think nothing of it. I was glad I could help. It was no big deal." In fact, that is the PAY he wanted. He knows that volunteer work is a lot like wetting one's pants. Probably no one will notice, but it gives him a warm feeling all over. We can not all volunteer, or his efforts will be hidden in the confusion. So, let's be grateful to him and tell him so. But, without all of us 'takers', where would the 'givers' be.

*Last Popular War

To summarize, Jim:

Rule 1: TANSAAFL

You have invited me to lunch for a fee, now you tell me I not only have to bring food of my own, but also wash the dishes before I can eat. If I knew the rules BEFORE I paid, I might have looked for another way to dine.

Rule 2: Volunteer

By all means volunteer, but not all at once, please. Praise those who do, and don't feel bad that you are a 'taker'. Where would they be without us?

n

Rule 3: Don't criticize.

The secret is to do it in a way that results in a positive reaction on the part of the receiver. By using a humble attitude and pretending total ignorance of the subject, ask your correspondent to educate you as to why some other way can't be tried to achieve common aims. Somewhere in the discussion he may discover the answer you wanted in the first place, and with pride of authorship, will claim it as his own. Volunteers - when you accept responsibility you also imply that you will accept criticism. If you're not doing anything, that's the only thing for which you can be criticized.

Thanks Jim, for your provocative piece. You will note that my tongue is only partly in my cheek.

Henry M. Connor

```
*****
* The NEW Taig BBS *
* 300/1200 bps. *
* 612/425-2533 *
* 24 hours *
*****
```

AModem 7.5

Program by Trent Dudley

Reviewed by Chuck Grimsby

AModem 7.5, for those of you who don't know, is the official Fixed version of Trent Dudley's AModem 7.44 which had a few bugs, and which many people had "fixed" themselves with varying degrees of success. This time, Trent's done it right!

AModem 7.5 is truly a marvel in the Telecommunications world. It works with all Disk Operating Systems, and hardware configurations, and it's a ShareWare Program! Of course, to get all that into one program would be almost insane to actually try to do, so this program comes with files that you put together yourself to make it truly compatible for your system. This also makes it a smaller program leaving more of your computer's memory free.

AModem 7.5 will also work with OSS's Basic XL/XE which will give you a bigger buffer in the EXTENDED mode. There's no real help in using the faster operating speed of Basic XL/XE, or even Turbo-Basic.

Don't worry about putting the files together, Trent has also written an excellent set of documents to go with it, and all the instructions you'll ever need for this program are included in there. A help file is also displayed at Boot-up or by pressing ^H, so don't worry about forgetting what does what while you're online.

Note: Throughout this article the "^" character stands for the Control key which is pressed together with another key to get the action or response desired.

AModem 7.5 is actually a two program set, both written in regular Atari Basic with a lot of machine language strings to help speed things up a bit.

The main program, AMODEM75. BAS, reads a file created by the second program, AUTGEN75. BAS. AUTGEN75. BAS creates the file for the autodialer function of AMODEM75. BAS. It also allows you to store your passwords for each BBS in a way that AModem75. BAS can read and send through your modem at the touch of a couple of keys (^ & P at the same time to be precise. You may consider that one key, if you like).

AUTGEN75. BAS also allows you to make comments about each BBS that will also display from the Autodial menu. So if a BBS is only open during certain hours, you'll see those hours on the screen right next to the BBS's name. A feature Part-time BBS SysOps (& their families) are sure to love.

And speaking of time, AMODEM75. BAS also has two clocks that display both the time of day, and your connect time. Especially nice for those of us who use Pay BBS's such as CompuServe, Delphi & GENie.

The "Software Clock" in AMODEM 7.5 will also support those of us who have the R-Time-B Cart, or (if you don't have one)

will work on it's own. Simply set the time at Boot-up, and away you go. The clock is fairly accurate too. I've personally hit the reset key, exited to DOS, done some file transfers, re-ran AModem75. BAS, and have found the clock to be still there, zipping up to the proper time from when I hit the reset key.

Taking a cue from the popular BackTalk program (From ANTIC publishing), Trent's included the Joystick in the program to send eight different characters through your modem. Y,N,^S & ^Q are there as well as ^N, ^X, ^P and <Return> when the fire button is pushed.

Both programs are written in Basic with some Machine Language strings thrown in for speed. This means for the most part that you are free to modify the programs as much as you want. Trent only asks that if you Upload the programs to any BBS you Upload the original UNMODIFIED programs so that the people who download can do their own modifying without first trying to figure out what you've done to it.

As I was saying, you are free to modify your own copy as much as you want, and in fact in the documents are quite a few references to where each line is and what each variable does. One of the first things I did was to change it so that it boots up in lower case, with word wrap on. (40 column BBSs are getting hard to find now a days, so that word wrap comes in handy!). There's also a place in the program for those of you who don't have the 1+ long distance dialing. Just change the string for long distance dialing to whatever your needs are (up to 20 characters) and away you go. Since I do a good deal of my telecommunicating from where I work, I changed the long distance dialing code to "9-" so I can get an outside line from work with out a lot of hassle. The codes sent from the joystick are even changable if you so desire.

Like I said before, the documents contain everything you need to know about what and where to change the program to make it fit your needs. Just remember to SAVE a copy to disk after you've made your changes.

There are ten 80 character Macros that can be programmed. This is a nice feature for sending those things out that you do so often. For instance, many BBSs first ask for your password and then for the last 4 of your phone number. Simple to put into a macro, since Trent Dudley also put into his macros the ability to read that file from the AUTGEN. BAS file. Just have the macro send the password, then the last four numbers of your phone. Just think. Two keypresses, one to dial the number and one to activate your macro, and you're online to your favorite BBS.

Personally, since I do a lot of long distance BBSing, I also added macros to send my first name, my last name, my city & state, and my full phone number. These seem to be the most commonly asked questions when first logging on to a new BBS. Once I'm a registered user on a BBS, I use the "send password, send last four of phone number" macro to log me on.

I've actually only found one "bug" in the program. It can't handle 7-bit boards without putting a little heart (which is a ASCII 'null') in front of every line. But since 7-bit boards are few (and getting fewer) this doesn't seem like too big a deal.

There are some things I would wish for in the program(s). Like for instance, I'd like to see a longer password allowed. Twenty digits would be nice. This way I could use the ^P funtion to send my GEnie & CompuServe passwords to those systems.

I'd also like to be able to send more then just one character out via the joystick port. On a lot of BBSs, after pressing your selection you also have to press return. So a "command + return" option would be nice to have on the joystick.

However, the program, as it stands now, certainly is quickly becoming the curent "Standard" for other programs to beat. And I have no qualms about it. In fact from the first time I used it I knew it would become the only program I would be using. And that's what has happened. (Sorry ANTIC, BackTalk's been put in with the other program that I now no longer use.)

```
*****
* The NEW Taig BBS *
* 300/1200 bps. *
* 612/425-2533 *
* 24 hours *
*****
```

Sometimes There Is No Lunch
By Nathan Block

Jim Johnson wrote an article last month on "There Ain't No Such Thing As A Free Lunch". I want to look at a similar topic but in this case there is NO lunch.

There are people like you who own ATARI computers. But their location may prevent them from getting little or any software for use. I encourage all of us as members of a USER'S group to step in and help them. Send them a disk of public domain utility programs. Send them DOM's in exchange for money and the postage. I personally feel we have it pretty good here in the Twin Cities. We can easily get to TAIG, we have Wizard's Works, User Friendly, Alpha Tech, Computer Station, and other stores. But what if you live in a small town? No giant computer store is sitting there! So what do you do, the best you can. You can download but at 300 baud that can get tiresome. You can order things but postage and handeling usually ups the price a little bit. Is there lunch here? Find out where the needy members are and help them! Sometimes there is NO lunch.

GT DataManager to SynFile+

or

How I changed our DOM listing from GT DataManager to SynFile+

by Chuck Grimbsy

First of all, I want to thank Tom Green for doing the monumental task of typing in all the DOM information into the GT DataManager program. With out that there is no way I would of even attempted to establish a Disk of the Month data base in SynFile+ or any other program for that matter. Thanks TOM!!!

So why did I do it? Well first of all, I happen to like SynFile+ better then GT DataManager. It happens to be my data base program of choice. Secondly, the printed listing we had wasn't in disk number order, and people being what they are, some didn't like that, and complained to me about it. And the fact that the printed listing had to be turned backwards to read. (The pages had to be turned from left to right instead of right to left as most books are.)

When I got the program and data base file, I soon found out why all this was. The file had simply outgrown the GT DataManager program. Attempting a sort only locked up the program, and the print function would only print to a printer, always starting out at position 0, allowing no room for the holes in the paper. SynFile+ could change all that, but (as I understand it) the SynFile+ program hasn't been donated to the group whereas GT DataManager was. (We work with what we have folks!) (hint, hint)

The first problem was that the two programs didn't store the data in the same way. Loading in the files to my word processor told me that.

GT DataManager stores it's data in one big string with a "@" and a return (ATASCII codes 64 and 155 Respectively) at the end of each record. SynFile+ uses a lot of embedded control characters and inverse characters to indicate what goes into what fields. So how to change the GT file over to SynFile+? Luckily, SynFile+ has a routine to "trade" information with other programs via DIF (Data Interchange Format). (Note: DIF is a trademark of VisiCalc and the Lotus Development Co.)

Fine, now how does DIF work?? Easy solution: make a DIF file from a file I already have. (SynFile+ has a routine for that too!) Printing out the DIF file I made (using the copy function from Atari DOS 2.x) I quickly realized that all the DIF format was was a Header file, then the actual Data, and a lot of ASCII control codes to tell beginning of data, end of data, and next field.

The file looked like this:

```
TABLE
0,1
""
VECTORS
0,3
""
```


TUPLES

0,4

""

DATA

0,0

""

-1,0

BOT

1,0

"Name #1

"

1,0

"Name #2

"

1,0

"Name #3

"

-1,0

BOT

1,0

"Address #1

"

1,0

"Address #2

"

1,0

"Address #3

"

-1,0

BOT

1,0

"City, State #1

"

1,0

"City, State #2

"

1,0

"City, State #3

"

-1,0

BOT

1,0

"Zipcode #1"

1,0

"Zipcode #2"

1,0

"Zipcode #3"

-1,0

EOD

(I'd like to thank the guy that uploaded that text file too, but I didn't get his name. Thanks who-ever-you-are!)

At this point, I was (again) thankful that I had learned to program so long ago. Serious (I.E. those who do it for a living) may belittle BASIC, but it can come in awfully handy in situations like this!

Ok, now comes the actual programming task. I knew from the GT DataManager program that there were 730 records in the file. (That's one heck of a lot of typing Tom!) I also found out that there were 5 fields in the file, the File Name field was 12 characters long, the Program (description) was 30 characters long, the Type was 5 characters long, the Disk # field was 3 characters long and the Key Words field was 29 characters long. All this was necessary information for the program I was writing.

Question: Could I put the data base into memory and then work with it from there? Answer: a little math. $12+30+5+3+29=79$. Add two more for the @ sign and the return =81. Multiply by the number of records (730) =59130 bytes. Nope! I'll have to work from the disk file and write to another disk file. (unfortunately this means I'll have to make 5 passes through the disk file, once for each field I need to convert over. But, if I keep the program short and put as much as possible at the top of the program the computer will also work faster.)

Question: How to get the data from the disk file into the computer? Answer: Since GT DataManager puts a return at the end of each record I can use the INPUT statement and get each record one at a time and use string manipulation "tricks" to get the information I need. (Good! this is easier then getting the data one character at a time!)

So here's basically what the program needs to do (in english):

Open 2 files, one to read from (the GT DataManager file) and one to write to (the DIF file).

Print out to the DIF file the DIF header with a VECTORS value of 0,730 (the number of records in the file) and a TUPLES value of 0,5 (number of fields per record)

Now Print to the DIF file: BOT (this means Beginning of Tuple [field]) and a 1,0 which tells the DIF routine that a data string is coming.

INPUT a record from the GT file, and PRINT to the DIF file the Characters in positions 1 through 12 in encased in quotes. (Note: the DIF format treats anything encased in quotes as data, everything else is a instruction to the DIF routine.)

Then print to the DIF file another 1,0 so the DIF program will know more data is coming for this tuple [field].

Repeat this routine 730 times, then instead of printing 1,0,

(I ran the SynFile->DIF function on my Christmas Card list. I've shortened list and changed the names to "Protect the innocent")

Note that in the example DIF file has all the names first, then all the addresses, all the cities & states and finally all the zipcodes. DIF apparently extracts all the data from the first field then the second field then the third and so on, instead of just a simple list like you would get if you used SynFile+'s Print Labels function.

"Great!" I thought, "this will be easy". (foolish me). The problem was that the Header had things like VECTORS and TUPLES in it. A VECTOR I thought I could figure out, but what the heck is a TUPLE? A (not so) quick trip via modem to the national BBSs I'm on told what a vector and a tuple was. Someone had uploaded a text file on the DIF format, which I quickly downloaded and read. It turns out that a Vector is the number of records in the file, and a Tuple is the number of fields.

print -1,0 which tells the DIF routine that's all for this tuple.

Close the GT DataManager file and then open it again (this avoids the error #136 [end of file] and starts the read over from the beginning which is what we want to do anyways.)

Still keeping the DIF file open, print another BOT and 1,0 [new tuple] and do the routine over again, this time printing out (to the DIF file) the characters in positions 13-42, then do it again for positions 43-47, and again for positions 48-50, and again for positions 51-79.

Finally, after all that is done and the -1,0 is printed to the DIF file, print to it a EOD (to tell the DIF routine that it's done) and close the file.

Great! Now the GT Data Manager is converted over to DIF format. Now I have to get the DIF format into SynFile+ format. Luckily, I don't have to write a program to do that!

Booting SynFile+ and selecting the DIF->SynFile+ option the program begins working it's magic. At this point I'd like to say I'm sure glad I've got a second disk drive and lot's of blank disks. Both the DIF file and the resulting SynFile+ file were much too big to put on the same disk. Having a second drive I was able to just sit and watch the screen flash colors and hope it was working then having to exchange disks every other minute as the program took about half an hour to run.

Now, before SynFile+ will allow you to look at the file, I had to reindex it. Another 45 minutes of watching the screen change colors. When I was finally allowed to look at the records, I found that SynFile+ had given the names of the fields A,B,C,D and E, and had made all the fields 30 characters long! Now I have to edit the file.

After first closing the file, I chose the *create* file, and then I just renamed the field names to what they were named in GT DataManager. Note: A little trick in SynFile+'s operation: You can rename the fields to anything you want or move them around and not have to do anything else. If you add a field, delete a field, or change the lengths you'll have to do a merge. And a merge REQUIRES that the field names are the same in both files.)

Selecting to edit the file again, I in effect created a new file by changing the lengths of the files to what they were in GT DataManager and added a record # field. (see note above.) I added the record # field because for some reason there's less of chance that

SynFile+ will lose a record when it has a record # when doing merges and updates then if one isn't there. Going back to SynFile+ proper, I told the program I wanted the index on the Record # field and the disk # field, closed the file, and told it to do a merge with the old file. 50 minutes later the program ended. Now I had to reindex the file. 50 minutes later the file I have today came out. All sorted in order by disk number as so many had asked for, and

I can print out the file with space for the holes in the paper. (actually, I prefer to print to disk and let my word processor handle that and the page breaking and page numbering and all that kind of stuff, but that's my personal preference.)

How long did all this take? Well in real time, this kept me occupied for about half a month. In actual time sitting at the computer (and subtracting the time I used to correct my own mistakes) only about 12 hours (I made a lot of mistakes). But I thought that the project was worth it.

I hope you all like the new DOM listing, and can appreciate the time that was spent both by Tom Green for doing all that typing, and me for converting it over to SynFile+.

We'll be releasing the Synfile+ files for the TAIG Disk Of the Month inventory next month on a special DOM so you can maintain your own lists. Remember you'll also need SynFile+ to use this disk. On the back will be listing printed out (80 columns) for those of you who don't have SynFile+ but would still like your own listing, and there will also be a DIF listing for those of you who would like to keep the list on another program.

XMM801 Utility Disk
from Starfleet Software
Reviewed by Jim Johnson

If you own Atari's XMM801 printer, you should seriously consider purchasing this disk today. Terry Ortman of Starfleet Software has assembled a nice collection of utilities to take advantage of the XMM801's graphics capabilities.

The XMM801 recognizes most Epson printer control codes. For text oriented software there are few difficulties. However, the XMM801 is only compatible with Epson's medium resolution graphics mode; and most graphics oriented software on the market uses Epson's high resolution graphics mode. For example, Print Shop will not work with the XMM801 for this reason.

The XMM801 Utility Disk is comprised of public domain and magazine published programs which have been modified to support this printer.

The programs included are:

G: This popular graphics printer handler was originally published in ANALOG.

PRTOOLXM.BAS This program will print all ATASCII characters, including graphics characters, in any loadable font. It has several other features such as multi-column printing, variable print size, variable line spacing, and more.

MATTEDIT.BAS and MATTEDIT.BXE This 40 column text editor permits the inclusion of graphic characters. Originally intended for BBS Sysops for the creation of text files for transmission; it can also print the files it creates on the XMM801. A more sophisticated BASIC XE version is also included.

BANNER.BAS Create your own sideways printed text banners or the size you specify.

SDUMP.BAS This program dumps uncompressed pictures in the Micro-Painter format to the printer.

KWIKDUMP.BAS and KOALPNT.BAS These programs dump Koala format pictures to the printer. One is faster and the other is more sophisticated.

SETUP.BAS This handy program will pre-configure your printer for use with programs that do not support the XMM801.

Although the original versions of these utilities can be freely shared with other individuals, Starfleet has copyrighted the XMM801 enhancements made to them. Be aware that sharing of this software is illegal. To Starfleet's credit, none of the software is copy protected. Purchasers can freely create back-ups or place the programs on multiple disks to enhance other programs while minimizing disk swapping.

Starfleet normally requests \$10.00 for the two sided disk which includes documentation files. However, Terry Ortman is selling this disk right now for \$5.00 according to his letter published in the September issue of Analog.

Mr. Ortman also indicates that he can re-master some commercial software for use with the XMM801 for very reasonable fees. He does require proof that you legitimately purchased the software.

If you own an XMM801 printer, send your check or money order to Starfleet Software, 1037 West Leafland Avenue, Decatur, IL 63522-1537. I recieved my disk within a week.

NEXT MEETING OCTOBER 25

Editor's Notes

Well, if you haven't noticed, we have a bit of a problem. I no longer have the time, nor the inclination for that matter, to continue to edit the Taig newsletter. There are many reasons, but the one major reason is the fact that I've now been editor for about 3 years. This is besides being BBS Sysop for over about a year, serving as Treasurer, helping Dave Stengel coordinate DOM's amongst a host of other duties for the club. I've finally started to burn myself out.

What does it take to be an editor? A fair question. For those of you who've been Taig members a rather short time, you wouldn't remember some of the early newsletters Dave Stengel and I put together. I look back through them and cringe. When we started, I didn't even own a printer, and had the barest knowledge possible to the workings of Atariwriter. I'd type up my articles and reviews, yes I used to write newsletter articles besides the editor's notes, and Dave would print them out. There's quite a bit of room for experimentation and a wide margin of error in this job. Hardware wise, all you need is a computer and a printer, pretty standard equipment. Software is the editor's choice. I use Atariwriter, simply because I tend to be rather obstinate. If you'd rather use Paperclip or Speedscript (which happens to be in the clubs library) that's fine, whatever you are comfortable with. You also need a good pair of shears, a ruler, a razor blade and a roll of tape if you decide to follow the cut & paste method of layout that I adopted. If you've a wordprocessor that will allow multiple column printing, or if you decide to go to full page width columns you can dump the cutting utensils. The only other requirement is a couple of hours a month (it takes me 2-8 hours depending upon how many pages, and how many I have to re-type or write myself) to layout and paste together a master copy.

I'm willing to give any help I can to whoever wishes to take over the job. Anything goes, pure, raw, uncensored power of the free press. If you need to be inticed remeber that you'll have free membership for as long as you are a club officer, which newsletter editor is. If you are interested in taking on the job, give any of the officers (listed on the front page) a call. We do need a replacement as soon as possible, I can no longer guarentee that I can publish a monthly newsletter.

I want to thank you all for bearing with me through my tenure as editor, I realize that my spelling has been horrible at best. Thanks for your patients, editing the newsletter has been a tremendous learning experiance.

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NOTICE

BOTH THE NOVEMBER & DECEMBER MEETING DATES HAVE BEEN CHANGED. THE NEW DATES ARE: NOVEMBER 22 DECEMBER 20

Goldrunner
For the Atari ST
Reviewed by Steve Lang
Reprinted from STING

Goldrunner by Microdeal is a superb new arcade game. It is sold in the U.S. by MichTron. The game is quite straight forward and has a very small manual (half of which is written in French).

The object of the game is to pilot your spaceship through the Ring Worlds of Triton. You are equipped with lasers and super-speed plus you are much more maneuverable than your opponents. You have to avoid smashing into tall buildings and getting hit by bombs released by enemy ships.

It is very hard to stay alive at first. After you gain some experience with the game you will discover the secret to advancing levels (If you can not discover this secret leave a message on the Sting BBS and I will tell you).

Following an advance of levels, you go through a Space Invaders like intermission game in which you attempt to shoot 64 alien space ships. You receive 50 points for each ship you destroy and an added bonus of 10000 points for shooting all of them. It is very difficult to shoot all of them.

As you advance levels it will get harder and harder to win. There will be more obstacles and many more aliens to contend with but after a while you should have no troubles advancing to the fourth or fifth level in one game.

There are, amazingly enough, a couple of bad points to the game. For instance, my high score list got messed up after a couple of games of play. I did not do anything to harm the disk and treated it in a normal fashion. I have spoken to someone from MichTron about this on GENie and they say there have been numerous reports of this happening. They believe that something is wrong with the copy protection interacting with the hardware on the current machines. Current Notes also mentioned this in a recent issue. The other major bad point was the documentation which is very short and does not tell you much about the game at all.

Overall however, Goldrunner is very good. The problem I had with the high score list has not affected the game play in the least, and subscribers to GENie can learn lots of hints from addicts of the game and MichTron themselves.

17 ways to kill almost any organization:

By Rober Handley

Reprinted from CIA RDM

1. Don't attend the meetings, but if you do, arrive late.
2. Be sure to leave before the meeting is closed.
3. Never have anything to say at the meeting; wait until you get outside.
4. When at the meetings, vote to do everything, then go home and do nothing.
5. The next day, find fault with officers and other members.
6. Take no part in the organization's affairs.
7. Be sure to sit in the back so you can talk things over with a friend.
8. Get all the organization will give you, but don't give anything back in return.
9. Never ask anyone to join the organization.
10. At every opportunity, threaten to resign and try to get others to do so.
11. Talk cooperation, but don't cooperate.
12. If asked to help, say you haven't the time.
13. Never read anything pertaining to the organization.
14. Never accept an office, as it is far easier to criticize than to do anything.
15. If appointed to a committee, never give any time or service to the committee.
16. If you receive a renewal notice, ignore it.
17. Don't do anything more than you have to, and when others use their abilities to help the cause, howl because the organization is run by a clique.

Customizing AUTORUN.SYS

By Ron Hamilton

Reprinted from the ICCG newsletter

Part of the "boot" process with Atari DOS 2.0 and 2.5 is an attempt to locate, load, and execute a file named "AUTORUN.SYS". This can be any machine language object code file with an appended execution address.

DOS.SYS contains the specified file in ATASCII form at address \$170C to \$1719 (5900-5913). The default file is "D1:AUTORUN.SYS". You can see this with the following BASIC code:

```
10 FOR I=5900 TO 5913:PRINT CHR$(PEEK(I));:NEXT I
```

You can, of course, POKE anything you like into these addresses and add a custom touch to your DOS. It is even conceivable to make your DOS look for something like "D2:MYFILE.OBJ", which would make your DOS totally useless on a one drive system. My personal DOS is modified only slightly to look for "D1:A?????.SYS"; the wild cards take up the same memory space as the default and will also accept the stock file name.

The utility is the fact that I can use any seven characters between the "A" and the ".SYS" to describe my file and have some idea of what the particular AUTORUN.SYS does. I have "ARUNMENU.SYS", "ABCOLON.SYS", etc. You may have others that would make a directory listing much more informative. Here is how to do it:

```
10 DIM F$(14):F$="D1:A?????.SYS"
20 FOR I=1 TO 14
30 POKE 5899+I,ASC(F$(I,I))
40 NEXT I
50 OPEN #1,8,0,"D:DOS.SYS"
60 END
```

The open command in line 50 will write the DOS file to a disk in drive 1, so you won't have to go to DUP.SYS and manually write the DOS file with option "H". Either way, you must write the new DOS.SYS to the disk before you can boot your system with it.

The END in line 60 forces BASIC to close all open IOCB's (Input Output Control Blocks). Obviously, you can define F\$ to be whatever you like in line 10. But give some careful thought before you go POKEing around.

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Next TAIG meeting
October 25, 1987
TAIG 7:00 pm
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St. Louis Park, MN